



COLORADO

Department of Public
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

July 30, 2015

Paul Seby, Registered Agent
London Mine Limited Liability Company
Holland & Hart
555 17th Street #3200
Denver, Colorado 80202
(and via email: pmseby@hollandandhart.com)

Certified Mail Number: 7014 2870 0000 7699 5788

**RE: Service of Notice of Violation/Cease and Desist Order/Order for Civil Penalty,
Number: IO-150730-1**

Dear Mr. Seby:

London Mine Limited Liability Company is hereby served with the enclosed Notice of Violation/ Cease and Desist Order/ Order for Civil Penalty (the "NOV/CDO/OCP"). The NOV/CDO/OCP is issued by the Colorado Department of Public Health and Environment's Water Quality Control Division (the "Division") pursuant to the authority given to the Division by §§25-8-602, 25-8-605, and 25-8-608 C.R.S., of the Colorado Water Quality Control Act, (the "Act"). The Division bases the NOV/CDO/OCP upon findings that London Mine Limited Liability Company has violated the Act, the permit regulations promulgated pursuant to the Act and its discharge permit, as described in the enclosed NOV/CDO/OCP.

Pursuant to §25-8-603, C.R.S., London Mine Limited Liability Company is required, within thirty (30) calendar days of receipt of this NOV/CDO/OCP, to submit to the Division an answer admitting or denying each paragraph of the Findings of Fact and responding to the Notice of Violation. Additionally, pursuant to the authority given to the Division by §25-8-608, C.R.S., the Division has imposed a civil penalty as outlined in the attached NOV/CDO/OCP. Payment of the imposed civil penalty should be made in accordance with the methods referenced in the Order for Civil Penalty.

Please be advised that the Division is continuing its investigation into this matter and the Division may identify supplementary violations that warrant amendments to this enforcement action or the issuance of additional enforcement actions.

Should you or representatives of London Mine Limited Liability Company desire to discuss this matter informally with the Division, or if you have any questions regarding the NOV/CDO/OCP, please do not hesitate to contact me by phone at (303) 692-3634 or by electronic mail at kelly.morgan@state.co.us.



Sincerely,



Kelly Morgan, Enforcement Specialist
Clean Water Enforcement Unit
WATER QUALITY CONTROL DIVISION

Enclosure(s)

cc: Enforcement File

ec: Annette Quill, Senior Assistant Attorney General
Natasha Davis, EPA Region VIII
Sheila Cross, Park County Environmental Health Department
Nicole Rowan, Watershed Section, CDPHE
Michael Beck, Community Development and Partnership Section, CDPHE
Bret Icenogle, Engineering Section, CDPHE
Kelly Jacques, Field Services Section, CDPHE
Kenan Diker, Permits Section, CDPHE
Tania Watson, Compliance Assurance, CDPHE



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July 30, 2015

Judith Anne Meyer, Personal Representative, Estate of Benjamin Lee Wright

Judith Anne Meyer, Individually

5575 South Monaco Street

Greenwood Village, Colorado 80111

(and via email: judemeyer@comcast.net)

Certified Mail Number: 7014 2870 0000 7699 5962

**RE: Service of Notice of Violation/Cease and Desist Order/Order for Civil Penalty,
Number: IO-150730-1**

Dear Ms. Meyer:

You and the Estate of Benjamin Lee Wright are hereby served with the enclosed Notice of Violation/ Cease and Desist Order/ Order for Civil Penalty (the "NOV/CDO/OCP"). The NOV/CDO/OCP is issued by the Colorado Department of Public Health and Environment's Water Quality Control Division (the "Division") pursuant to the authority given to the Division by §§25-8-602, 25-8-605, and 25-8-608 C.R.S., of the Colorado Water Quality Control Act, (the "Act"). The Division bases the NOV/CDO/OCP upon findings that you and the Estate of Benjamin Lee Wright have violated the Act, the permit regulations promulgated pursuant to the Act and discharge permit, as described in the enclosed NOV/CDO/OCP.

Pursuant to §25-8-603, C.R.S., you and the Estate of Benjamin Lee Wright are required, within thirty (30) calendar days of receipt of this NOV/CDO/OCP, to submit to the Division an answer admitting or denying each paragraph of the Findings of Fact and responding to the Notice of Violation. Additionally, pursuant to the authority given to the Division by §25-8-608, C.R.S., the Division has imposed a civil penalty as outlined in the attached NOV/CDO/OCP. Payment of the imposed civil penalty should be made in accordance with the methods referenced in the Order for Civil Penalty.

Please be advised that the Division is continuing its investigation into this matter and the Division may identify supplementary violations that warrant amendments to this enforcement action or the issuance of additional enforcement actions.

Should you and/or the Estate of Benjamin Lee Wright desire to discuss this matter informally with the Division, or if you have any questions regarding the NOV/CDO/OCP, please do not hesitate to contact me by phone at (303) 692-3634 or by electronic mail at kelly.morgan@state.co.us.

Sincerely,

Kelly Morgan, Enforcement Specialist
Clean Water Enforcement Unit
WATER QUALITY CONTROL DIVISION



Enclosure(s)

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Tania Watson, Compliance Assurance, CDPHE





COLORADO

Department of Public Health & Environment

WATER QUALITY CONTROL DIVISION

NOTICE OF VIOLATION / CEASE AND DESIST ORDER / ORDER FOR CIVIL PENALTY NUMBER: IO-150730-1

IN THE MATTER OF: LONDON MINE LIMITED LIABILITY COMPANY
ESTATE OF BENJAMIN LEE WRIGHT
JUDITH ANNE MEYER
CDPS PERMIT NUMBER CO0038334
PARK COUNTY, COLORADO

Pursuant to the authority vested in the Colorado Department of Public Health and Environment's (the "Department") Division of Administration by §§25-1-109 and 25-8-302, C.R.S., which authority is implemented through the Department's Water Quality Control Division (the "Division"), and pursuant to §§25-8-602, 25-8-605, and 25-8-608 C.R.S., the Division hereby makes the following Findings of Fact and issues the following Notice of Violation / Cease and Desist Order / Order for Civil Penalty:

FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. At all times relevant to the violations cited herein, London Mine Limited Liability Company ("London Mine, LLC") was a Colorado limited liability company in good standing and registered to conduct business in the State of Colorado.
2. London Mine, LLC was originally formed through the filing with the Colorado Secretary of State's Office of its Articles of Organization on December 11, 1996, with Ben L. Wright and a second individual named as London Mine, LLC's co-members and co-managers.
3. On or about November 15, 2002, the second individual resigned as the co-manager of London Mine, LLC, and the LLC acquired that individual's membership interest, resulting in Ben L. Wright, Jr. becoming the sole manager and sole member of London Mine, LLC.
4. On January 27, 2010, Ben L. Wright, Jr. died. On February 10, 2010, the Denver County Probate Court appointed Judith Anne Meyer as Personal Representative of the Estate of Benjamin Lee Wright, aka Ben L. Wright, Jr., aka Ben L. Wright (hereinafter "the Wright Estate").
5. Pursuant to London Mine, LLC's Operating Agreement, upon Ben L. Wright's death, the Wright Estate, acting through Judith Anne Meyer, became the sole member of London Mine, LLC.



6. On June 30, 2010, pursuant to London Mine, LLC's Operating Agreement, the Wright Estate, as sole member of London Mine, LLC, took action to appoint Judith Anne Meyer as London Mine, LLC's sole manager to serve in such capacity until her resignation or removal as provided in the London Mine, LLC's Operating Agreement.
7. London Mine, LLC is a "person" as defined under the Water Quality Control Act, §25-8-103(13), C.R.S. and its implementing permit regulation, 5 CCR 1002-61, §61.2(73).
8. London Mine, LLC owns and/or operates the London Mine Water Tunnel and associated treatment works, located approximately twelve (12) miles northwest of the town of Fairplay, Park County, Colorado, (the "Facility").
9. The Wright Estate, standing in the shoes of the deceased individual Ben L. Wright, is a "person" as defined under the Water Quality Control Act, § 25-8-103(13), C.R.S. and its implementing permit regulation, 5 CCR 1002-61, § 61.2(73).
10. The Wright Estate, standing in the shoes of the deceased Ben L. Wright, through Judith Anne Meyer as its Personal Representative, operates and manages the Facility, has the authority to make timely discovery of illegal discharges from the Facility, the authority to direct activities to control discharges at the Facility, and the authority to prevent and abate violations at the Facility.
11. The Wright Estate, standing in the shoes of the deceased Ben L. Wright, is the alter ego of London Mine, LLC.
12. Judith Anne Meyer, an individual, as the Wright Estate's Personal Representative and as the sole manager for the London Mine, LLC, is a "person" as defined under the Water Quality Control Act, § 25-8-103(13), C.R.S. and its implementing permit regulation, 5 CCR 1002-61, § 61.2(73).
13. Judith Anne Meyer, in her capacity as Personal Representative for the Wright Estate and as sole manager for the London Mine, LLC, operates and manages the Facility. As Personal Representative for the Wright Estate, Ms. Meyer also has the authority/responsibility to negotiate and authorize the sale of the assets held by the Wright Estate. This particular authority/responsibility is highly relevant in the context of this case, given the Wright Estate's claim that it currently possesses insufficient funds to take the necessary measures to come into compliance with the Colorado Water Quality Control Act, its implementing permit regulations and the Colorado Discharge Permit System permit associated with the Facility.
14. Judith Anne Meyer is *the sole* responsible corporate officer for London Mine, LLC. Since June 30, 2010, Ms. Meyer, as sole manager of London Mine, LLC, has been the sole point-of-contact for compliance issues related to the London Mine Water Tunnel. Since that time, Ms. Meyer has been the sole individual responsible for the day-to-day decision-making regarding compliance at the Facility. Ms. Meyer is also the individual with the authority/responsibility to negotiate and authorize sale of the assets held by London Mine, LLC. This particular authority/responsibility is highly relevant in the context of this case, given the London Mine, LLC's claim that it currently possesses insufficient funds to take the necessary measures to come into compliance with the Colorado Water Quality Control Act, its implementing permit regulations and the Colorado Discharge Permit System permit associated with the Facility.
15. References made in this document to any act or acts of the Respondents named herein shall be deemed to mean the act of each Respondent acting individually, jointly and severally.

16. The London Mine Water Tunnel is part of the mine workings of the London Mine which is an underground gold mine that has ceased operation. Historically, the principle ores at this mine included gold and a small amount of silver. The contributing wastewater sources at the Facility include acid mine drainage from the London Mine. The acid mine drainage is conveyed from the London Mine Water Tunnel portal to a sedimentation pond for passive treatment that consists solely of settling. No other wastewater treatment occurs at the Facility.
17. The Facility is the subject of the Colorado Discharge Permit System, Permit No. CO-0038334 (the "Permit"). The current Permit became effective on February 1, 2006. The Permit was amended with Amendment #1 and reissued effective July 1, 2007. The Permit was modified to correct typographical errors with Minor Modification #1 and reissued effective August 31, 2009. The Permit expired on January 31, 2011 and has subsequently been administratively extended, pending permit reissuance.
18. The Permit authorizes London Mine, LLC to discharge treated wastewater from the Facility through the outfall associated with the sedimentation pond (Outfall 001A) and into South Mosquito Creek. The Permit includes an authorization for Outfall MON1, which is a database distinction assigned to Outfall 001A for monitor and report only effluent parameters. Outfall 001A is physically located at approximately 39° 16' 22.5" North and 106° 8' 41.5" West.
19. Pursuant to 5 CCR 1002-61, §61.8, London Mine, LLC must comply with all the terms and conditions of the Permit, and violations of such terms and conditions as specified in the Permit may be subject to civil and criminal liability pursuant to §§25-8-601 through 25-8-612, C.R.S.
20. On July 15, 2009, the Division issued a Notice of Violation/ Cease and Desist Order, Number IO-090715-1, to London Mine, LLC (the "2009 Order"). The 2009 Order cited London Mine, LLC for violations of the Permit and included a number of corrective actions that London Mine, LLC was required to implement at the Facility in order to ensure permit compliance.
21. On March 21, 2013, the Division issued a Notice of Violation/ Cease and Desist Order, Number IO-130321-1, to London Mine, LLC (the "2013 Order"). The 2013 Order cited London Mine, LLC for violations of the Permit and included a number of corrective actions that London Mine, LLC was required to implement at the Facility in order to ensure permit compliance.

Failure to Comply with Permit Effluent Limitations

22. Pursuant to Part I.A.1 of the Permit, London Mine, LLC's permitted discharge at Outfall 001A shall not exceed, among others not subject of this action, the effluent limitations specified below:

London Mine LLC DISCHARGE LIMITATIONS			
Parameter	30-day Average	7-day Average	85 th Percentile of 24 month Rolling Average
Zinc, potentially dissolved (µg/l)	NA	1,300	654
Cadmium, potentially dissolved (µg/l)	3.2	NA	NA

23. Pursuant to Part I.B.1. of the Permit, London Mine, LLC is required to monitor defined effluent parameters at specified frequencies to provide an indication of compliance or non-compliance with the effluent limitations of the Permit.
24. Pursuant to Part I.E. of the Permit, London Mine, LLC is required to summarize and report the results of its effluent monitoring to the Division via monthly discharge monitoring reports ("DMR"). Each DMR is to include a certification by London Mine, LLC that the information provided therein is true, accurate and complete to the knowledge and belief of London Mine, LLC.
25. London Mine, LLC's DMRs submitted for Outfall 001A for the reporting periods between January 2013 and June 2015 include, among other information and data, the following effluent concentration summary data for potentially dissolved zinc and potentially dissolved cadmium which exceeded the effluent limitations imposed by Part I.A.1. of the Permit:

LONDON MINE, LLC Effluent Self Monitoring Data		
DISCHARGE MONITORING REPORTING PERIOD	SAMPLE MEASUREMENTS FOR OUTFALL 001A	
ZINC, potentially dissolved	7 DAY AVERAGE LIMIT= 1,300 µg/l	85 th PERCENTILE OF 24 MONTH ROLLING AVERAGE LIMIT= 654 µg/l
February 1-28, 2013	--	2,967
March 1-31, 2013	1,300	2,967
April 1-30, 2013	1,300	2,967
May 1-31, 2013	1,700	2,967
June 1-30, 2013	4,400	3,279.5
July 1-31, 2013	4,100	3,279.5
August 1-31, 2013	3,900	3,514.5
September 1-30, 2013	3,700	3,655
October 1-31, 2013	4,600	3,810
November 1-30, 2013	2,800	3,810
December 1-31, 2013	1,900	3,810
January 1-31, 2014	2,100	3,810
February 1-28, 2014	1,700	3,810
March 1-31, 2014	1,600	3,810
April 1-30, 2014	1,500	3,810
May 1-31, 2014	2,200	3,810
June 1-30, 2014	2,900	3,810
July 1-31, 2014	5,000	4,010
August 1-31, 2014	5,000	4,265
September 1-30, 2014	3,500	4,265
October 1-31, 2014	2,200	4,265
November 1-30, 2014	2,700	4,265
December 1-31, 2014	2,000	4,265
January 1-31, 2015	--	4,265
February 1-28, 2015	--	4,265
March 1-31, 2015	--	4,265
April 1-30, 2015	--	4,265
May 1-31, 2015	--	4,265
June 1-30, 2015	4,200	4,155

LONDON MINE, LLC Effluent Self Monitoring Data		
DISCHARGE MONITORING REPORTING PERIOD	SAMPLE MEASUREMENTS FOR OUTFALL 001A	
CADMIUM, potentially dissolved	30 DAY AVERAGE LIMIT= 3.2 µg/l	
February 1-28, 2013	3.6	--
March 1-31, 2013	3.3	--
April 1-30, 2013	4	--
May 1-31, 2013	5.4	--
June 1-30, 2013	17	--
July 1-31, 2013	14	--
August 1-31, 2013	14	--
September 1-30, 2013	13	--
October 1-31, 2013	17	--
November 1-30, 2013	10	--
December 1-31, 2013	5.7	--
January 1-31, 2014	6.5	--
February 1-28, 2014	5.7	--
March 1-31, 2014	4.8	--
April 1-30, 2014	4.4	--
May 1-31, 2014	8.1	--
June 1-30, 2014	12	--
July 1-31, 2014	19	--
August 1-31, 2014	20	--
September 1-30, 2014	13	--
October 1-31, 2014	8.3	--
November 1-30, 2014	9.2	--
December 1-31, 2014	7.1	--
January 1-31, 2015	3.8	--
February 1-28, 2015	3.5	--
June 1-30, 2015	18	--

26. Potentially dissolved zinc and potentially dissolved cadmium are “pollutants” as defined by §25-8-103(15), C.R.S. and its implementing permit regulation, 5 CCR 1002-61, §61.2 (76), or indicators thereof.
27. The Permit and its subsequent amendment do not authorize the pollutant discharge levels identified above in paragraph 25. London Mine, LLC does not have any other permit authorizing such discharge into State Waters.
28. London Mine, LLC’s failure to comply with the Permit effluent limitations constitutes violations of Part I.A.1 of the Permit.

Discharging Without a Permit

29. Pursuant to §25-8-501(1), C.R.S., and 5 CCR 1002-61, §61.3(1)(a), no person shall discharge any pollutant into any state water from a point source without first having obtained a permit from the Division for such discharge, and no person shall discharge into a ditch or man-made conveyance for the purpose of evading the requirement to obtain a permit under this article.
30. On May 27, 2015 the Division received notification from London Mine, LLC that the flow measuring device located at Outfall 001A had recorded a reduced discharge flow rate and upon investigation it was discovered that the concrete retaining wall around the London Mine Water Tunnel portal had collapsed and was obstructing the flume that normally conveys mine water from the London Mine to the sedimentation pond. Therefore, approximately fifty to sixty percent of the mine water exiting the London Mine Water Tunnel portal was flowing overland and discharging into South Mosquito Creek (the other forty to fifty percent of the mine water exiting the London Mine Water Tunnel portal was being directed to the sedimentation pond and discharging through Outfall 001A). Subsequent flow data provided by London Mine, LLC that was obtained from the flow measuring device located at Outfall 001A establish that the discharge flow rate at Outfall 001A began to decrease by approximately fifty percent on May 23, 2015.
31. On June 1, 2015, the Division received notification from the London Mine, LLC that the concrete material obstructing the flume had been removed and mine water exiting the London Mine Water Tunnel portal was once again being directed to the sedimentation pond and discharging through Outfall 001A. Subsequent flow data provided by London Mine, LLC that was obtained from the flow measuring device located at Outfall 001A establish that the discharge flow rate at Outfall 001A returned to normal on June 1, 2015. Therefore, the discharge of mine water from the London Mine Water Tunnel portal into South Mosquito Creek occurred from at least May 23, 2015 through June 1, 2015.
32. The mine water discharged from the London Mine Water Tunnel portal into South Mosquito Creek contained, among other things, cadmium, zinc, copper, iron, lead, manganese, nickel, suspended solids, and acidic pH values. Cadmium, zinc, copper, iron, lead, manganese, nickel, suspended solids, and acidic pH are "pollutants" as defined by §25-8-103(15), C.R.S. and its implementing permit regulation, 5 CCR 1002-61, §61.2 (76), or indicators thereof.
33. South Mosquito Creek is "state waters" as defined by §25-8-103(19), C.R.S. and its implementing permit regulation, 5 CCR 1002-61, §61.2 (102).
34. The London Mine Water Tunnel portal is a "point source" as defined by §25-8-103(14), C.R.S. and its implementing permit regulation, 5 CCR 1002-61, §61.2 (75).
35. Pursuant to Part II.A.8. of the Permit, any discharge to state waters from a point source other than the specifically authorized Outfall 001A is prohibited.
36. London Mine, LLC, the Wright Estate, and Judith Anne Meyer do not have any other permits authorizing the discharge of pollutants from the London Mine Water Tunnel portal overland and into South Mosquito Creek.
37. London Mine, LLC, the Wright Estate, and Judith Anne Meyer's discharge of cadmium, zinc, copper, iron, lead, manganese, nickel, suspended solids, and acidic pH overland and into South Mosquito Creek constitutes a "discharge of pollutants" as defined by §25-8-103(3), C.R.S.

38. London Mine, LLC, the Wright Estate, and Judith Anne Meyer's discharge of cadmium, zinc, copper, iron, lead, manganese, nickel, suspended solids, and acidic pH from the London Mine Water Tunnel portal overland and into South Mosquito Creek constitutes an unauthorized discharge of pollutants from a point source into state waters in violation of §25-8-501(1), C.R.S., 5 CCR 1002-61, §61.3(1)(a), and Part II.A.8. of the Permit.

NOTICE OF VIOLATION

39. Based on the foregoing Findings of Fact and Conclusions of Law, you are hereby notified that the Division has determined that London Mine, LLC, the Wright Estate, and Judith Anne Meyer have violated the following sections of the Colorado Water Quality Control Act, its implementing permit regulations and the Permit.

Section 25-8-501(1), C.R.S., which states "No person shall discharge any pollutant into any state water from a point source without first having obtained a permit from the division for such discharge, and no person shall discharge into a ditch or man-made conveyance for the purpose of evading the requirement to obtain a permit under this article..."

5 CCR 1002-61, §61.3(1)(a), which states in part, "No person shall discharge any pollutant into any state water from a point source without first having obtained a permit from the Division for such discharge..."

Part I.A.1. of Permit No. CO0038334, which states in part, "In accordance with the Water Quality Control Commission Regulations for Effluent Limitations, Section 62.4, and the Colorado Discharge Permit System Regulations, Section 61.8(2), the permitted discharge shall not contain effluent parameter concentrations, which exceed the following limitations:"

Part II.A.8 of Permit No. CO0038334, which states, "Any discharge to waters of the State from a point source other than specifically authorized by this permit is prohibited."

REQUIRED CORRECTIVE ACTION

Based upon the foregoing factual and legal determinations and pursuant to §25-8-602 and §25-8-605, C.R.S., London Mine, LLC, the Wright Estate, and Judith Anne Meyer are hereby ordered to:

40. Cease and desist from all violations of the Colorado Water Quality Control Act, §§25-8-101 through 25-8-803, C.R.S., its implementing regulations promulgated thereto and the Permit.

ORDER FOR CIVIL PENALTY

41. Pursuant to §25-8-608(1), C.R.S. any person who violates any provision of the Colorado Water Quality Control Act, or of any permit issued under the Act, or any control regulation promulgated pursuant to the Act, or any final cease and desist order or clean-up order shall be subject to a civil penalty of not more than ten thousand dollars per day for each day during which such violation occurs.

42. Based upon the Findings of Fact and Notice of Violation above, the Executive Director, through his designee (hereinafter the "Executive Director"), has determined that a civil penalty is appropriate and warranted in this matter. Therefore, the Executive Director hereby imposes a civil penalty in the amount of Two Hundred Forty Thousand Two Hundred Fifty Nine Dollars (\$240,259.00) against London Mine, LLC, the Wright Estate, and Judith Anne Meyer, jointly and severally, for the violations cited above. The civil penalty was determined in accordance with the procedures outlined in the Division's Civil Penalty Policy (May 1, 1993). A copy of the civil penalty calculation is attached hereto as Exhibit A and is incorporated herein by reference.
43. If London Mine, LLC, the Wright Estate, and Judith Anne Meyer do not contest the findings and penalty assessment set out above, the civil penalty shall be paid within sixty (60) calendar days of the date of this Notice of Violation / Cease and Desist Order / Order for Civil Penalty. Method of payment shall be by certified or cashier's check drawn to the order of the "Colorado Department of Public Health and Environment," and delivered to:

Kelly Morgan
Colorado Department of Public Health and Environment
Water Quality Control Division
Mail Code: WQCD-CWE-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

OBLIGATION TO ANSWER AND REQUEST FOR HEARING

Pursuant to §25-8-603, C.R.S. and 5 CCR 1002, §21.11 you are required to submit to the Division an answer affirming or denying each paragraph of the Findings of Fact and responding to the Notice of Violation. The answer shall be filed no later than thirty (30) calendar days after receipt of this action.

Section 25-8-603, C.R.S. and 5 CCR 1002, §21.11 also provide that the recipient of a Notice of Violation may request the Division to conduct a public hearing to determine the validity of the Notice, including the Findings of Fact. Such request shall be filed in writing with the Division and include the information specified in 5 CCR 1002, §21.4(B)(2). Absent a request for hearing, the validity of the factual allegations and the Notice of Violation shall be deemed established in any subsequent Department proceeding. The request for hearing, if any, shall be filed no later than thirty (30) calendar days after issuance of this action. The filing of an answer does not constitute a request for hearing.

APPEAL OF CIVIL PENALTY

Pursuant to 5 CCR 1002, §21.12(B) and 5CCR 1002, §21.4(A)(3)(b), an appeal of the determination of the civil penalty by the Executive Director shall be made in writing to the Division. Requests for such an appeal should be made in accordance with 5 CCR 1002, §21.12(B), shall be filed no later than thirty (30) calendar days after issuance of this action and shall include the information specified in 5 CCR 1002, §21.4(B)(2).

FALSIFICATION AND TAMPERING

Be advised, in accord with §25-8-610, C.R.S., that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Colorado Water Quality Control Act or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this article is guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than ten thousand dollars, or by imprisonment in the county jail for not more than six months, or by both such fine and imprisonment.

POTENTIAL CIVIL AND CRIMINAL PENALTIES

You are also advised that any person who violates any provision of the Colorado Water Quality Control Act (the "Act"), §§25-8-101 to 803, C.R.S., or of any permit issued under the Act, or any control regulation promulgated pursuant to the Act, or any final cease and desist order or clean-up order issued by the Division shall be subject to a civil penalty of not more than ten thousand dollars per day for each day during which such violation occurs. Further, any person who recklessly, knowingly, intentionally, or with criminal negligence discharges any pollutant into any state waters commits criminal pollution if such discharge is made without a permit, if a permit is required by the Act for such discharge, or if such discharge is made in violation of any permit issued under the Act or in violation of any Cease and Desist Order or Clean-up Order issued by the Division. By virtue of issuing this Notice of Violation / Cease and Desist Order, the State has not waived its right to bring an action for penalties under §§25-8-608 and 609, C.R.S., and may bring such action in the future.

POTENTIAL CRIMINAL PENALTIES

You are also advised that any person who recklessly, knowingly, intentionally, or with criminal negligence discharges any pollutant into any state waters commits criminal pollution if such discharge is made without a permit, if a permit is required by the Act for such discharge, or if such discharge is made in violation of any permit issued under the Act or in violation of any Cease and Desist Order or Clean-up Order issued by the Division. By virtue of issuing this Notice of Violation / Cease and Desist Order / Order for Civil Penalty, the State has not waived its right to bring an action for penalties under §25-8-609, C.R.S., and may bring such action in the future.

RELEASE OR DISCHARGE NOTIFICATION

Pursuant to §25-8-601, C.R.S., you are further advised that any person engaged in any operation or activity which results in a spill or discharge of oil or other substance which may cause pollution of the waters of the state, shall notify the Division of the discharge. If said person fails to so notify, said person is guilty of a misdemeanor, and may be fined or imprisoned or both.

EFFECT OF ORDER

Nothing herein contained, particularly those portions requiring certain acts to be performed within a certain time, shall be construed as a permit or license, either to violate any provisions of the public health laws and regulations promulgated thereunder, or to make any discharge into state waters. Nothing herein contained shall be construed to preclude other individuals, cities, towns, counties, or



duly constituted political subdivisions of the state from the exercise of their respective rights to suppress nuisances or to preclude any other lawful actions by such entities or the State.

For further clarification of your rights and obligations under this Notice of Violation / Cease and Desist Order you are advised to consult the Colorado Water Quality Control Act, §§25-8-101 to 803, C.R.S., and regulations promulgated thereunder, 5 CCR 1002.

Issued at Denver, Colorado, this 30th day of July, 2015.

FOR THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT



Patrick J. Pfaltzgraff, Director
WATER QUALITY CONTROL DIVISION

Exhibit A

WASTEWATER PENALTY COMPUTATION WORKSHEET

Entity Names: London Mine Limited Liability Company ("LM LLC"), Estate of Benjamin Lee Wright, Judith Anne Meyer <i>*Note that references made in this document to any act or acts of the parties named herein shall be deemed to mean the act of each Respondent acting individually, jointly, and severally.</i>	Permit Number: C00038334
Beneficial Use Classification: Upper South Platte River Segment 02c - <u>Aq Life Cold 1</u> , Recreation E, Water Supply, Agriculture	
Type of Facility: Industrial Major- Inactive Mine	Flow: 0.97-1.6 MGD

This penalty calculation was developed in accordance with the Water Quality Control Division's Civil Penalty Policy (May 1, 1993). The penalty calculation methodology described in the Civil Penalty Policy can be illustrated by the following equation:

$$\text{Civil Penalty} = (\text{Effluent Violations Penalty} + \text{Administrative Violations Penalty}) \div \text{Aggravating/Mitigating Factors} + \text{Economic Benefit}$$

Part I - Effluent Violations Penalty Determination

$$\text{Effluent Violations Penalty} = (\text{Potential Damage} + \text{Fault} + \text{History}) \times \text{Days of Violation}$$

A. Potential Damage Component

	Violation Type	Adjustment	Amount in Dollars
Line 1	Effluent Limit Violations (zinc and cadmium)	NA	\$2,752.00- \$3,040.00
	<p><i>Calculation:</i> The potential damage component is calculated based on the receiving water beneficial uses, type of pollutants, and percentage exceedance of effluent limitations.</p> <p>Potential Damage Component = Pollutant Parameter Point Value × Percent Exceedance Multiplier × \$200</p> <p>The London Mine Limited Liability Company (LM LLC) discharges approximately one million gallons per day of mine drainage from the London Mine, which exits the London Mine via the London Mine Water Tunnel and is subsequently conveyed to a sedimentation pond and discharged into South Mosquito Creek. LM LLC submitted discharge monitoring reports (DMRs) reporting exceedances of the zinc and/or the cadmium permit effluent limits during</p>		

Exhibit A

	Violation Type	Adjustment	Amount in Dollars
	<p>the February 2015 through June 2015 monthly reporting periods.</p> <p>Pollutants and Beneficial Use: Limits for zinc and cadmium are water quality based and were established for the protection of the beneficial uses of the receiving stream segment and therefore, the parameter point values for these pollutants were derived from the Beneficial Use Table of the Civil Penalty Policy (Figure 1). A parameter point value of 8 was assigned based on protection of the aquatic life class 1 beneficial use. It should be noted that the river segment downstream from South Mosquito Creek (Mosquito Creek) is listed on Colorado's Section 303(d) list as impaired for cadmium. While South Mosquito Creek was not specifically included on the Section 303(d) list, the portion of South Mosquito Creek downstream from the London Mine to the confluence with Mosquito Creek exceeds the dissolved cadmium and zinc standards. The discharge from the London Mine Water Tunnel is a contributing factor towards the impairment.</p> <p>Degree of Exceedance: The Percent Exceedance Multiplier values were determined based on the actual flow values that were reported on the DMRs each month and the percent by which the limit was exceeded for each specific effluent violation (Figure 3 of the Civil Penalty Policy).</p> <p>The attached <i>Civil Penalty Calculation Worksheet</i> displays the Percent Exceedance Multiplier for each month and the total calculated potential damage penalties for the effluent violations that occurred between the February 2015 and June 2015 monitoring periods. Consistent with Division practice and Section (A)(1) of the Civil Penalty Policy, for any calendar day where there was more than one violation cited, the potential damage component of the penalty for that day shall be set using the largest penalty amount for any individual parameter. Therefore, for the purposes of this calculation, the Division will follow this practice and utilize the penalties associated with the most significant effluent limit violation during each reporting period (month).</p>		
Line 2	Unauthorized Discharge	\$2,752.00 + 50%	\$4,128.00
	<p>Calculation: On May 27, 2015 the LM LLC provided notification to the Division that the concrete retaining wall around the tunnel portal had collapsed, obstructing the flume that routes mine water from the London Mine Water Tunnel portal to the pipeline that conveys the water to the sediment pond. Approximately 50% of the mine water flowing from the London Mine Water Tunnel portal was therefore flowing overland and discharging into South Mosquito Creek. On June 1, 2015 the LM LLC notified the Division that the concrete retaining wall slab had been removed from the flume and all mine water was being properly routed to the pipeline and into the sediment pond and discharging through the authorized Outfall 001A. Subsequent flow data provided by LM LLC establish that flows measured at Outfall 001A reduced by approximately 50% beginning May 23, 2015 and resumed to normal flow rates on June 1, 2015.</p> <p>In cases of an unauthorized discharge, and in the absence of site specific flow, sampling and water quality data, the Civil Penalty Policy allows the Division to assess a potential damage penalty of up to \$6,000 per day. LM LLC did not sample the release, however, the Civil Penalty Policy also allows the Division to make reasonable assumptions on the potential damage of the violation, and where adequate data exists, calculate the potential damage using the same criteria as a permitted discharge. For purposes of this penalty calculation, the Division conservatively chose to follow this methodology and calculated the potential damage of the unauthorized discharge based on best available information, including DMR data and information supplied in LM LLC's "Application for Underground Injection Control Program Review for Permit or Permit by Rule Authorization" (April 2014) and "London Mine LLC Facility Improvement and Water Management Options" (July 2013).</p>		

Exhibit A

	Violation Type	Adjustment	Amount in Dollars
	<p>Daily flow rates measured at the permitted discharge point (Outfall 001A) during May 2015 (excluding the reduced flow rate data from May 23-31, 2015) establish an average daily flow of 1.05 MGD, which is consistent with historic DMR data establishing an average daily max flow of 1.1 MGD at Outfall 001A during the month of May. Water quality data supplied in LM LLC's "Application for Underground Injection Control Program Review for Permit or Permit by Rule Authorization" (April 2014) and "London Mine LLC Facility Improvement and Water Management Options" (July 2013) establish that the discharge directly from the London Mine Water Tunnel (prior to treatment in the sediment pond) has an estimated dissolved zinc concentration of 3,810 µg/l and a dissolved cadmium concentration of 17 µg/l. Further, the contribution of mine water from the London Mine Extension Tunnel has an estimated dissolved zinc concentration of 77,700 µg/l and a dissolved cadmium concentration of 315 µg/l. Other pollutants, including copper, iron, lead, manganese, nickel, suspended solids, and acidic pH are known to be in the mine water but for purposes of this calculation, the Division focused on zinc and cadmium as the primary pollutants of concern. It should be noted that this unauthorized, untreated discharge of pollutants from the London Mine Water Tunnel occurred in addition to the discharge from the permitted outfall and therefore likely increased the pollutant load on South Mosquito Creek.</p> <p>To calculate the potential damage penalty following the methodology outlined in the Civil Penalty Policy, the Division estimated a flow rate of >0.5 MGD (50% of the flow directly from the London Mine Water Tunnel) and a percent exceedance of >200% (the zinc and cadmium concentrations of untreated mine water from the London Mine Water Tunnel and London Mine Extension Tunnel both exceed the presumed permit effluent limitations for a daily maximum zinc (1,300 µg/l) and a 30-day average cadmium concentration (3.2 µg/l)). A parameter point value of 8 was assigned based on protection of the aquatic life class 1 beneficial use.</p> <p>The attached <i>Civil Penalty Calculation Worksheet</i> displays the Percent Exceedance Multiplier and the total calculated potential damage penalties for each day when the unauthorized discharge was known to have occurred (May 23, 2015 through June 1, 2015). Consistent with Division practice and Section (A)(1) of the Civil Penalty Policy, for any calendar day where there was more than one violation cited, the potential damage component of the penalty for that day shall be set using the largest penalty amount for any individual parameter. Therefore, the Division conservatively chose to follow this practice and utilize the penalties associated with the most significant potential damage penalties for each day.</p> <p><u>Determination of Unauthorized Discharge Percent Increase</u></p> <p>Pursuant to the Civil Penalty Policy, in order to account for the fact that the discharge was unauthorized, the Division may increase the potential damage component of the calculation by up to 50%. The Division's practice for unauthorized discharges is to apply the full 50% increase to the potential damage component, absent any extenuating circumstances that would suggest otherwise. As such, the Division determined a 50% increase to the potential damage component is warranted.</p>		
Line 3			N/A
	Calculation:		
Line 4			N/A
	Calculation:		
Line 5	Potential Damage Total (Sum of Lines 1 through 4)	(Not to exceed \$6000/day)	\$2,752.00- \$4,128.00

Exhibit A

B. Fault Component

Line 6	Fault: Category 3	(Not to exceed \$3000/day)	Amount in Dollars
	<p><u>Justification:</u></p> <p><u>Effluent Violations</u></p> <p>This component is calculated based on the degree of fault that can be attributed to the violator. The Division issued the NOV/CDO Number IO-090715-1 to the LM LLC in July 2009 citing significant exceedances of the zinc and cadmium effluent limits. As a result of that enforcement action, LM LLC chose to forgo pursuing the option of wastewater treatment and instead attempted to comply with the permit by doing minor construction within the inner workings of the mine (build a berm around the water raise to prevent drainage from the Extension Tunnel from entering the Water Tunnel). The effluent concentrations of zinc and cadmium reported by LM LLC began to decline, however, this strategy proved to be only temporarily successful at mitigating the ongoing violations. Subsequent collapses in the inner workings of the mine caused water to accumulate in the Extension Tunnel and eventually overtop the berm around the water raise. In June 2011, the LM LLC began reporting significant exceedances of the zinc and cadmium effluent limits. The Division issued the second NOV/CDO Number IO-130321-1 in March 2013, again citing exceedances of the zinc and cadmium effluent limits and requiring LM LLC to undertake specific corrective actions to remedy the situation. In response to the second NOV/CDO, LM LLC hired a consultant to evaluate the mine and identify necessary treatment solutions. However, the LM LLC failed to implement one of these treatment solutions.</p> <p>LM LLC has legal and technical resources available. Additionally, LM LLC was well aware of the violations and the circumstances leading to the violations as well as treatment options to resolve the violations, but LM LLC failed to undertake any actions to address the ongoing violations.</p> <p>Therefore, the Division assigns a Category 3 Fault to the effluent violations. The Division has conservatively chosen the midpoint of the Category 3 range, as the Division has no additional information to support adjustments from this value.</p> <p><u>Unauthorized Discharge</u></p> <p>A photograph taken prior to the collapse (date stamped 4/29/2012) provided by LM LLC depicts a significant crack in the concrete retaining wall at the London Mine Water Tunnel portal. Based on the photos taken after the collapse, the collapse appears to have occurred at the cracked portion of the retaining wall. Therefore, LM LLC's failure to address the compromised retaining wall contributed in part to the collapse.</p> <p>More importantly, upon learning of the collapse and unauthorized discharge, LM LLC failed to take immediate action to control, mitigate, cease the discharge, and/or sample the discharge, despite direction to do so from the Division. The short term response to control the mine water was relatively simple (remove the blockage and/or temporarily route the mine water around the blockage and into the pipeline to the sediment pond) however, LM LLC didn't initiate any of these measures until several days after becoming aware of the release.</p> <p>Again, LM LLC has legal and technical resources available and the response to the unauthorized discharge was relatively inexpensive, but LM LLC failed to undertake any</p>		\$2,500.00

Exhibit A

	<p>immediate actions to address the violation.</p> <p>Therefore, the Division assigns a Category 3 Fault to the unauthorized discharge. The Division has conservatively chosen the midpoint of the Category 3 range, as the Division has no additional information to support adjustments from this value.</p>
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C. History Component

			Amount in Dollars
Line 7	History: Categories 1 and 4	(Not to exceed \$1000/day)	\$600.00-\$1,000.00
	<p><i>Justification:</i> Penalties under the History component are classified into five categories ranging from \$0 to \$1,000/day of violation.</p> <p><u>Effluent Violations (Category 1 History)</u> As noted above, the Division issued two enforcement actions (NOV/CDOs) to LM LLC citing violations of the zinc and cadmium effluent limits, one action in 2009 and a second action in 2013. Therefore, the Division assigns a Category 1 History to the effluent violations. The Division has chosen the high point of the Category 1 range given LM LLC's history of formal enforcement (one of these actions was recently issued in 2013) and because LM LLC's failed to substantially comply with the corrective action requirements of the 2013 NOV/CDO.</p> <p><u>Unauthorized Discharge (Category 4 History)</u> Again, the Division issued two NOV/CDOs to LM LLC citing violations of the zinc and cadmium effluent limits, one of these NOV/CDOs was issued in 2013. The Civil Penalty Policy outlines that in cases where a previous NOV was issued for violations other than those cited in the current NOV, a Category 4 History is appropriate. The Division conservatively chose to assign the high point of the Category 4 History to the unauthorized discharge given the recent history of formal enforcement actions.</p>		

Exhibit A

D. Days of Violation Determination

			Days of Violation
Line 8	Total Days of Violation		14
	<p><i>Justification:</i></p> <p><u>Effluent Violations</u> The Civil Penalty Policy outlines several methodologies to determine the days of violation for penalty calculation purposes. One of these methods is to conservatively assign one day of violation for each day of sampling required by the permit. The permit requires monitoring for metals once per month. Another method of determining days of violation, specifically with respect to violations of effluent limits for metals, is to equate the number of days of violation to the number of days in the averaging period.</p> <p>The LM LLC is considered a “major” facility by the state and federal government based on the volume of water discharged and the toxic pollutant potential of the effluent. In addition, the downstream segment from the LM LLC discharge is 303(d) listed as impaired for cadmium. Because of these factors, and because of the fact the discharge likely exceeded the permit limits on days that sampling was not required given that no treatment was provided to remove metals, the Division could assign one day of violation for each day in the averaging period. As noted in Line 1 above, LM LLC has reported exceedances of the zinc and/or the cadmium limits every monthly reporting period between February 2015 and June 2015. As such, the Division believes at least 120 days of violation have occurred during the February 2015 reporting period through the June 2015 reporting period.</p> <p>However, the Division has conservatively chosen to set the number of days of violation for each individual parameter based on the number of sampling events required by the permit. The permit requires monitoring once per month for cadmium and zinc. Therefore, the Division has assigned one day of violation for each limit that was violated. Again, consistent with Division practice and Section(A)(1) of the Civil Penalty Policy, the penalty for each reporting period of non-compliance for effluent limit violations is the parameter that would yield the highest penalty for the designated period, which in this case conservatively yields a total of 4 days of violation.</p> <p><u>Unauthorized Discharge</u> The Civil Penalty Policy outlines that for discharging without a permit, the number of days of violation will be set at the number of days the unpermitted discharge took place, as cited in the NOV. As outlined in Line 2 above and in the NOV/CDO, flow data and information provided by LM LLC establishes that the unauthorized discharge from the London Mine Water Tunnel portal likely began on May 23, 2015 and ceased on June 1, 2015, yielding a total of 10 days of violation.</p>		

Exhibit A

E. Effluent Violations Multi-Day Penalty Calculation

		Amount in Dollars
Line 9	Multi-Day Penalty Amount	\$103,828.00
	<p><i>Calculation:</i> (Potential Damage + Fault + History) × Days of Violation</p> <p><u>Effluent Violations</u></p> <p>February 2015: $(\\$3,040 + \\$2,500 + \\$1000) \times 1 = \\$6,540$</p> <p>March 2015: $(\\$2,752 + \\$2,500 + \\$1000) \times 1 = \\$6,252$</p> <p>April 2015: $(\\$2,752 + \\$2,500 + \\$1000) \times 1 = \\$6,252$</p> <p>May 2015: $(\\$2,752 + \\$2,500 + \\$1000) \times 1 = \\$6,252$</p> <p>June 2015: $(\\$2,752 + \\$2,500 + \\$1000) \times 1 = \\$6,252$</p> <p style="text-align: right;">TOTAL= \$31,548</p> <p><u>Unauthorized Release</u></p> <p>May 23, 2015: $(\\$4,128 + \\$2,500 + \\$600) \times 1 = \\$7,228$</p> <p>May 24, 2015: $(\\$4,128 + \\$2,500 + \\$600) \times 1 = \\$7,228$</p> <p>May 25, 2015: $(\\$4,128 + \\$2,500 + \\$600) \times 1 = \\$7,228$</p> <p>May 26, 2015: $(\\$4,128 + \\$2,500 + \\$600) \times 1 = \\$7,228$</p> <p>May 27, 2015: $(\\$4,128 + \\$2,500 + \\$600) \times 1 = \\$7,228$</p> <p>May 28, 2015: $(\\$4,128 + \\$2,500 + \\$600) \times 1 = \\$7,228$</p> <p>May 29, 2015: $(\\$4,128 + \\$2,500 + \\$600) \times 1 = \\$7,228$</p> <p>May 30, 2015: $(\\$4,128 + \\$2,500 + \\$600) \times 1 = \\$7,228$</p> <p>May 31, 2015: $(\\$4,128 + \\$2,500 + \\$600) \times 1 = \\$7,228$</p> <p>June 1, 2015: $(\\$4,128 + \\$2,500 + \\$600) \times 1 = \\$7,228$</p> <p style="text-align: right;">TOTAL= \$72,280</p>	

Part II - Administrative Violations Penalty Determination

	Violation Type	Adjustment	Amount in Dollars
Line 10			N/A
	<i>Calculation:</i>		
Line 11			N/A
	<i>Calculation:</i>		
Line 12			N/A
	<i>Calculation:</i>		
Line 13			N/A
	<i>Calculation:</i>		
Line 14	Administrative Violation Total (Sum of Lines 10 through 13)		\$0.00

Exhibit A

Part III - Base Penalty Total

		Amount in Dollars
Line 15	Base Penalty Total (Sum of Line 9 + Line 14)	\$103,828.00

Part IV - Application of Mitigating Circumstances

	Mitigating Circumstances	% Base Penalty Decrease	Amount in Dollars
Line 16	Factor A: Adhering to a Compliance Schedule	0%	\$0.00
	<i>Justification:</i> The LM LLC did not complete the required corrective actions outlined in the NOV/CDOs. Because the LM LLC failed to adhere to the compliance schedules, no penalty mitigation applies.		
Line 17	Factor B: Steps Taken Beyond Required Actions	0%	\$0.00
	<i>Justification:</i> As noted above, the LM LLC did not complete any of the minimum required corrective actions and therefore did not take any other steps beyond those required. Similarly, the LM LLC failed to take immediate action to control, mitigate, cease, and/or sample the unauthorized discharge. No penalty mitigation applies.		
Line 18	Factor C: Environmental Compliance Project	0%	\$0.00
	<i>Justification:</i> The LM LLC did not implement an environmental compliance project. Therefore, no penalty mitigation applies.		
Line 19	Factor D: Other Mitigating Circumstances	0%	\$0.00
	<i>Justification:</i> No other mitigating circumstances were indentified.		
Line 20	Sum of Lines 16 through Line 19	0%	\$0.00
Line 21	Adjusted Base Penalty Total (Sum of Line 15 + Line 20)		\$103,828.00

Part V- Economic Benefit Consideration

		Amount in Dollars
Line 22	Economic Benefit	\$136,431.00
	<i>Justification:</i> <u>Effluent Violations</u> In accordance with the Civil Penalty Policy, where the violator has benefited economically from noncompliance through savings on delayed or avoided design and construction costs, monitoring costs, etc., the violations are considered to be more serious and the Division will seek to recover the economic benefit as part of the overall penalty. The purpose of an economic benefit calculation is to determine the monetary savings associated with non-compliance, taking into consideration such factors as costs associated with capital investments in pollution control equipment and costs associated with operation and	

Exhibit A

maintenance of such equipment. The goal is that civil penalties should at least recover the economic benefit from noncompliance to ensure that members of the regulated community have a strong economic incentive to comply with environmental laws on time. Funds not spent on environmental compliance are available for other profit-making activities or, alternatively, a violator avoids the costs associated with obtaining additional funds for environmental compliance - a concept that is known in economics as opportunity cost. Economic benefit is “no fault” in nature. A violator need not have deliberately chosen to delay compliance (for financial or any other reasons). Economic benefit does not represent compensation to the state like a typical “damages” calculation, but instead is the minimum amount a violator must be penalized to return it to the position it would have been in had it complied on time.

As discussed above, LM LLC discharged mine wastewater that significantly exceeded the permit effluent limits. Even though the Division issued two formal enforcement actions that required LM LLC to address the ongoing water quality problems, LM LLC failed to take the necessary actions to ensure that LM LLC could reliably and consistently meet the permit limits. By failing to take the necessary steps to prevent and/or control the discharge of pollutants in excess of the permit limits, and thereby avoiding incurring the costs associated with managing the wastewater, LM LLC realized an economic benefit from its noncompliance.

After the 2009 NOV/CDO was issued, LM LLC was able to temporarily comply with the 7 day max and 30 day average zinc and cadmium limits (the 2 year rolling average remained out of compliance due to the nature of its averaging period). However, beginning in June 2011, LM LLC began reporting significant increases in the pollutant concentrations of zinc and cadmium in the discharge. At the very least, LM LLC should have started investigating solutions to the permit effluent limit exceedances at this time.

Following the issuance of the 2013 NOV/CDO, LM LLC submitted a “Facility Improvement Plan” that outlined several options for mine water management and treatment. One of these options was to construct and operate a new water treatment plant located inside the mine. The total anticipated budget for this option was about \$850,000, which is approximately the same cost as an alternative pilot project contemplated by LM LLC. Since the Division does not have specific information on the cost of the pilot project, and because constructing a wastewater treatment plant inside the water tunnel is similar in nature to the pilot project, the Division used the cost estimates for the wastewater treatment plant in its economic benefit analysis.

According to financial information submitted by LM LLC in its “Facility Improvement Plan” dated July 1, 2013, the capital costs associated with the wastewater treatment plant are \$702,437 with an annual operation and maintenance cost of \$67,000. The economic benefit that LM LLC realized by avoiding the costs of implementing a wastewater management strategy was analyzed using the Environmental Protection Agency’s economic benefit financial model “BEN.”

The Division previously assessed an economic benefit of non-compliance of \$855,071 for similar effluent violations from the June 2011 through January 2015 reporting periods, as outlined in the Order for Civil Penalty No IP-150317-1 that the Division issued to LM LLC on March 17, 2015 (the “OCP”). Because the economic benefit penalty calculation associated with the OCP contemplates the same infrastructure and annually recurring costs that LM LLC would have to implement to address the February 2015 through May 2015 effluent violations, the Division conservatively determined that in this case it is appropriate to utilize the previous BEN computation and modify the dates used in the model to account for the new violations.

Exhibit A

Using the BEN inputs identified below, EPA's BEN model determined that the resulting economic benefit of the avoided costs was \$986,502.

BEN Inputs

- Date of non compliance: June 1, 2011 (date that LM LLC began reporting exceedances of the 7 day max, 30-day average, and 2-yr rolling average zinc and cadmium limits)
- Date of compliance: 9/1/2016 (conservatively assumed based on the estimated date that a corrective action can be fully implemented given the construction season)
- Capital investment: \$702,437, date LM LLC should have made capital investment: 6/1/2011 (First date of reporting period that LM LLC reported consistent exceedances of the zinc and cadmium effluent limits). Note that the capital investment cost was provided in the "Facility Improvement Plan" dated July 2013 and therefore the costs outlined in the plan were determined based on the price level of goods and services in 2013. The BEN model does account for inflation and adjusted the \$702,436 costs accordingly to represent dollar value in 2011.
- Annually recurring: \$67,000, date LM LLC should have begun incurring costs: 6/1/2011 (First date of reporting period that LM LLC reported consistent exceedances of the zinc and cadmium effluent limits. Again, the annually recurring cost was provided in the "Facility Improvement Plant" dated July 2013 and therefore the cost was determined based on the price level of goods and services in 2013. The BEN model does account for inflation and adjusted the \$67,000 costs accordingly to represent dollar value in 2011.)
- Costs are considered avoided (not delayed) because the LM LLC failed to initiate any improvements to address the non-compliance
- Cost index assigned to account for inflation: GDP
-

Therefore, the Division conservatively determined that LM LLC realized an economic benefit of \$131,431 associated with the effluent violations that occurred between the February 2015 and May 2015 reporting periods. This value represents the difference between the current economic benefit of \$986,502 and the economic benefit of \$855,071 that was previously assessed in the OCP.

Note that the Division previously contracted with a financial analyst housed within the department to conduct an independent determination of the economic benefit in the case. The Division provided its BEN calculation and relevant supporting documentation to the analyst for review. The analyst concluded that the Division's calculation was consistent with accepted policies and procedures for using the BEN model to make an economic benefit determination and that the output of the BEN model was a reliable estimate of the economic benefit realized by LM LLC.

Unauthorized Discharge

Because the release was unauthorized and temporary, the Division conservatively determined that calculating and economic benefit based on water treatment costs was not appropriate. However, by failing to properly maintain the London Mine Water Tunnel portal to prevent the collapse, and by failing to take immediate actions necessary to control, mitigate, and cease and/or sample the discharge, the LM LLC realized some degree of economic benefit. Therefore, the Division chose to forgo the use of the BEN model and make an alternate determination of economic benefit associated with the unauthorized release, as allowed by the Civil Penalty Policy. In accordance with the Civil Penalty Policy, the Division chose to increase the initial fault Category 3 from the mid-point of the Category 3 (\$2,500) to the maximum allowable fault (\$3,000). This added penalty for economic benefit is likely sufficient to recover any economic benefit that may have been realized by LM LLC for the non-compliance.

\$500 fault increase x 10 days of violation= \$5,000

Exhibit A

Part VII - Violation Penalty Total

			Amount in Dollars
Line 23	Civil Penalty: (Sum Line 21 + Line 22)		\$240,259.00

Part VIII - Ability to Pay Adjustment

			Amount in Dollars
Line 24	Ability to Pay Reduction: N/A		\$0.00
	<p><i>Justification:</i> The purpose of conducting an ability to pay analysis is to determine if the cost of the necessary injunctive relief and penalty jeopardizes a violator's ability to continue operations and achieve compliance. The LM LLC has informed the Division that it does not intend on funding the necessary corrective actions.</p> <p>As outlined in the Civil Penalty Policy, the violator has the principal burden of establishing a claim of inability to pay a penalty. LM LLC has made claims of an inability to pay, and the Division was willing to consider that factor, but LM LLC has not submitted information clearly demonstrating an inability to pay. As such, an inability to pay the penalty could not be verified and, therefore, a reduction to the penalty amount is not warranted.</p>		

Part IX - Final Penalty

			Amount in Dollars
Line 25	Total Civil Penalty: (Sum Line 23 + Line 24)		\$240,259.00

CIVIL PENALTY CALCULATION WORKSHEET

PERMIT NO. C00038334

Flow Range: (MGD) 0.97-1.6MGD

Stream Classificati: CUSPUS02c: Aq life cold 1, rec E, water supply, ag

I. Potential Damage Component					
Report Period	Parameter	Reported Value	Limit	% Exc.	Parameter Points
Feb-15	Zn (rolling avg)	4265.00	654.00	552	8
	Cd (30 day avg)	3.50	3.20	9	8
Mar-15	Zn (rolling avg)	4265.00	654.00	552	8
Apr-15	Zn (rolling avg)	4265.00	654.00	552	8
May-15	Zn (rolling avg)	4265.00	654.00	552	8
Jun-15	Zn (max 7 day)	4200.00	1,300.00	223	8
	Zn (rolling avg)	4155.00	654.00	535	8
	Cd (30 day avg)	18.00	3.20	463	8
5/23/2015	Zn (max 7 day)	unpermitted	1,300.00	200	8
	Cd (30 day avg)	unpermitted	3.20	200	8
5/24/2015	Zn (max 7 day)	unpermitted	1,300.00	200	8
	Cd (30 day avg)	unpermitted	3.20	200	8
5/25/2015	Zn (max 7 day)	unpermitted	1,300.00	200	8
	Cd (30 day avg)	unpermitted	3.20	200	8
5/26/2015	Zn (max 7 day)	unpermitted	1,300.00	200	8
	Cd (30 day avg)	unpermitted	3.20	200	8
5/27/2015	Zn (max 7 day)	unpermitted	1,300.00	200	8
	Cd (30 day avg)	unpermitted	3.20	200	8
5/28/2015	Zn (max 7 day)	unpermitted	1,300.00	200	8
	Cd (30 day avg)	unpermitted	3.20	200	8
5/29/2015	Zn (max 7 day)	unpermitted	1,300.00	200	8
	Cd (30 day avg)	unpermitted	3.20	200	8
5/30/2015	Zn (max 7 day)	unpermitted	1,300.00	200	8
	Cd (30 day avg)	unpermitted	3.20	200	8
5/31/2015	Zn (max 7 day)	unpermitted	1,300.00	200	8
	Cd (30 day avg)	unpermitted	3.20	200	8
6/1/2015	Zn (max 7 day)	unpermitted	1,300.00	200	8
	Cd (30 day avg)	unpermitted	3.20	200	8
Total Potential Damage Penalty					
\$41,568					

Exhibit A

Run Name = LM BEN continui	
Present Values as of Noncompliance Date (NCD).	01-Jun-2011
A) On-Time Capital & One-Time Costs	\$542,662
B) Delay Capital & One-Time Costs	\$0
C) Avoided Annually Recurring Costs	\$182,832
D) Initial Economic Benefit (A-B+C)	\$725,493
E) Final Econ. Ben. at Penalty Payment Date,	
30-Aug-2015	\$986,502

C-Corporation w/ CO tax rates	7.5%
Discount/Compound Rate	BEN
Discount/Compound Rate Calculated By:	
Compliance Date	01-Sep-2016
Capital Investment:	avoided
Cost Estimate	\$702,437
Cost Estimate Date	01-Jul-2013
Cost Index for Inflation	GDP
Consider Future Replacement (Useful Life)	y (15)
One-Time, Nondepreciable Expenditure:	
Cost Estimate	\$0
Cost Estimate Date	N/A
Cost Index for Inflation	N/A
Tax Deductible?	N/A
Annually Recurring Costs:	
Cost Estimate	\$67,000
Cost Estimate Date	01-Jul-2013
Cost Index for Inflation	GDP
User-Customized Specific Cost Estimates:	N/A
On-Time Capital Investment	
Delay Capital Investment	
On-Time Nondepreciable Expenditure	
Delay Nondepreciable Expenditure	

Exhibit A

Discount/Compound Rate Calculation

Notes: (1) Corporate bond rates averaged across all industries (average of Aaa & Baa); Federal Reserve Statistical Release H.15.

(2) Combined state/federal marginal tax rates: $\text{federal} + (\text{state} * (1 - \text{federal}))$; Federation of Tax Administrators.

(3) Calculated as: $(1) * (100\% - (2))$. [Adjusts for tax-deductibility of interest payments.]

(4) Average corporate debt weight; Standard & Poor's Analysts' Handbook, S&P Industrials Sample Balance Sheet.

(5) Federal Reserve Statistical Release H.15. [Used as a proxy for the risk-free rate in the Capital Asset Pricing Model (CAPM)].

(6) Beta measures risk relative to overall stock market, with a value of 1.00 therefore setting risk at overall market.

(7) Differences of average returns between stock market vs long-term Treasuries, 1926 - prior yr; Ibbotson then Duff & Phelps.

(8) Calculated as $(6) * (7)$. [Also equal to (7), since (6) is equal to 1.00 for a company of average risk.]

(9) Calculated as $(5) + (8)$. [Reflects risk-free rate of return plus the company risk premium.]

(10) Calculated as $100\% - (4)$. [Reflects: total financing - debt = equity financing.]

(11) Calculated as $(3) * (4) + (9) * (10)$. [Reflects: (debt cost x debt weight) + (equity cost x equity weight).]

YEAR	average from: 2011 to: 2014											Final rate: 7.5%	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
	Cost of Debt	Tax Rate	After-Tax Debt Cost	Debt Weight	Long-Term Treasury Notes	Beta	Long-Horizon Risk Prem	Company Risk Premium	Equity Cost	Equity Weight	Rate		
1987	9.98%	38.0%	6.19%	42.4%	8.49%	1.00	7.4%	7.4%	15.9%	58%			
1988	10.27%	38.0%	6.37%	46.3%	8.91%	1.00	7.2%	7.2%	16.1%	54%			
1989	9.72%	37.6%	6.07%	42.7%	8.47%	1.00	7.2%	7.2%	15.7%	57%			
1990	9.84%	37.6%	6.14%	46.0%	8.58%	1.00	7.5%	7.5%	16.1%	54%			
1991	9.29%	37.6%	5.80%	41.1%	8.00%	1.00	7.2%	7.2%	15.2%	59%			
1992	8.56%	37.5%	5.35%	49.3%	7.34%	1.00	7.4%	7.4%	14.7%	51%			
1993	7.58%	38.3%	4.68%	44.0%	6.29%	1.00	7.3%	7.3%	13.6%	56%			
1994	8.30%	38.3%	5.12%	48.0%	7.49%	1.00	7.2%	7.2%	14.7%	52%			
1995	7.90%	38.3%	4.87%	41.3%	6.95%	1.00	7.0%	7.0%	14.0%	59%			
1996	7.71%	38.3%	4.76%	37.0%	6.83%	1.00	7.4%	7.4%	14.2%	63%			
1997	7.57%	38.3%	4.67%	32.1%	6.69%	1.00	7.5%	7.5%	14.2%	68%			
1998	6.88%	38.3%	4.24%	27.8%	5.72%	1.00	7.8%	7.8%	13.5%	72%			
1999	7.47%	38.3%	4.61%	26.1%	6.20%	1.00	8.0%	8.0%	14.2%	74%			
2000	8.00%	38.1%	4.95%	29.3%	6.23%	1.00	8.1%	8.1%	14.3%	71%			
2001	7.52%	38.0%	4.66%	33.5%	5.63%	1.00	7.8%	7.8%	13.4%	67%			
2002	7.15%	38.0%	4.43%	41.3%	5.43%	1.00	7.4%	7.4%	12.8%	59%			
2003	6.21%	38.0%	3.85%	36.8%	4.96%	1.00	7.0%	7.0%	12.0%	63%			
2004	6.01%	38.0%	3.73%	37.3%	5.04%	1.00	7.2%	7.2%	12.2%	63%			

Exhibit A

2005	5.65%	38.0%	3.50%	35.9%	4.64%	1.00	7.2%	7.2%	11.8%	64%
2006	6.04%	38.0%	3.74%	32.8%	5.00%	1.00	7.1%	7.1%	12.1%	67%
2007	6.02%	38.0%	3.73%	33.7%	4.91%	1.00	7.1%	7.1%	12.0%	66%
2008	6.54%	38.0%	4.05%	45.0%	4.36%	1.00	7.1%	7.1%	11.5%	55%
2009	6.30%	38.0%	3.91%	38.6%	4.11%	1.00	6.5%	6.5%	10.6%	61%
2010	5.49%	38.0%	3.40%	36.7%	4.03%	1.00	6.7%	6.7%	10.7%	63%
2011	5.15%	38.0%	3.19%	37.0%	3.62%	1.00	6.7%	6.7%	10.3%	63%
2012	4.31%	38.0%	2.67%	35.9%	2.54%	1.00	6.6%	6.6%	9.1%	64%
2013	4.67%	38.0%	2.90%	30.9%	3.12%	1.00	6.7%	6.7%	9.8%	69%
2014	4.51%	38.0%	2.80%	30.9%	3.07%	1.00	7.0%	7.0%	10.1%	69%
										7.7%
										6.8%
										7.7%
										7.8%

Exhibit A

Calculations for Specific Cost Estimates

	Date:	On-Time 01-Jun-2011	Delay 01-Sep-2016
<u>Capital Investment:</u>			
Original Cost Estimate		\$702,437	N/A
		÷	÷
GDP Value as of Cost Estimate Date, 01-Jul-2013		106.923	N/A
		x	x
GDP Value as of Specific Estimate Date		103.145	N/A
		=	=
Specific Cost Estimate, reflecting implicit annualized inflation rate of:		\$677,617 1.7%	N/A N/A
<u>One-Time, Nondepreciable Expenditure:</u>			
Original Cost Estimate		\$0	N/A
		÷	÷
GDP Value as of Cost Estimate Date, 01-Jan-2000		N/A	N/A
		x	x
GDP Value as of Specific Estimate Date		N/A	N/A
		=	=
Specific Cost Estimate, reflecting implicit annualized inflation rate of:		\$0	N/A
		N/A	N/A

Exhibit A

A) On-Time Capital & One-Time Costs																		
One-Time, Nondepreciable Expenditure	0																	
Capital Investment- Initial Installation	(677,617)																	
Depreciation- Federal	0		(387,224)	(82,974)	(59,258)	(42,317)	(30,256)	(30,222)	(30,256)	(15,111)								
Marginal Tax Rate (MTR)- Federal	35.0%		35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%								
Tax Liability Offset- Federal	0		135,528	29,041	20,740	14,811	10,589	10,578	10,589	5,289								
Depreciation- State (CO)	0		(387,224)	(82,974)	(59,258)	(42,317)	(30,256)	(30,222)	(30,256)	(15,111)								
MTR- State (CO), adj. for fed. deductibility	3.0%		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%								
Tax Liability Offset- State (CO)	0		11,654	2,497	1,783	1,274	911	910	911	455								
Net After-Tax Cash Flow	(677,617)		147,182	31,538	22,524	16,085	11,500	11,487	11,500	5,744								
PV Factor: Adjusts Cash Flow to NCD	1.0000		0.9644	0.8969	0.8344	0.7761	0.7220	0.6715	0.6246	0.5811								
PV Cash Flow as of NCD	(677,617)		141,941	28,287	18,793	12,484	8,303	7,713	7,183	3,337								
Federal Utilized Depreciation Schedule:			57.15%	12.25%	8.75%	6.25%	4.47%	4.46%	4.47%	2.23%								
State Utilized Depreciation Schedule:			57.15%	12.25%	8.75%	6.25%	4.47%	4.46%	4.47%	2.23%								
Bonus schedules & dates (also '08-13):			MACRS:	24.49%	17.49%	12.49%	8.93%	8.92%	8.93%	4.46%								
10-Sep-01 6-May-03			40.00%	17.14%	12.24%	8.74%	6.25%	6.24%	6.25%	3.12%								
5-May-03 1-Jan-05			57.15%	12.25%	8.75%	6.25%	4.47%	4.46%	4.47%	2.23%								
Imputed Lease Cost for Interim Period When On-Time (But Not Delay) Equipment Would Need Replacement																		
Applicable Only w/ Default Values of Delayed (Not Avoided) Capital and Considered Future Replacement																		
Total Imputed Lease Cost:	(537,637)		X							(101,441)								
PV Factor: Adjusts Cash Flow to NCD:	0.2793																	
PV Cash Flow as of NCD: (93.087)			+															

Exhibit A

C) Avoided Annually Recurring Costs

GDP value as of cost estimate date= 106,923									
GDP mid-point value:									
Period of Avoided Annual Costs; From: To:									
Annual Costs Avoided	103,768	105,428	106,923	108,603	110,130	111,780			
Marginal Tax Rate	01-Jun-2011	01-Jan-2012	01-Jan-2013	01-Jan-2014	01-Jan-2015	01-Jan-2016			
Net After-Tax Cash Flow	31-Dec-2011	31-Dec-2012	31-Dec-2013	31-Dec-2014	31-Dec-2015	01-Sep-2016			
PV Factor: Adjusts Cash Flow to NCD	(38,123)	(66,244)	(67,000)	(68,053)	(69,010)	(47,015)			
PV Cash Flow as of NCD	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%			
	(23,636)	(41,071)	(41,540)	(42,193)	(42,786)	(29,150)			
	0.9791	0.9244	0.8599	0.7999	0.7441	0.7004			
	(23,143)	(37,968)	(35,719)	(33,749)	(31,836)	(20,417)			

NPV of Avoided Annual Costs as of NCD (\$182,832)